

JUSTIFICATION FOR SOLE SOURCE ACQUISITION  
VALUES \$3,001 - \$100,000  
RECOMMENDATION AND DETERMINATION TO SOLICIT FROM ONE  
SOURCE - PR 4200400607

NASA, John F. Kennedy Space Center (KSC), will negotiate with TECOM Industries Inc. for the purchase of 201564-3 Broadband Omni directional Slant Linear Antenna 0.5 - 18GHz. [REDACTED]

NASA has a requirement and is currently operating the Automated Radio Frequency System (ARFMS) to analyze the electromagnetic environment at KSC. The ARFMS determines the radio frequency (RF) electromagnetic energy levels for interference to KSC operations. KSC has critical operations such as vehicle processing, payload processing, and tracking of launch vehicles. If a vehicle command or communication receiver were degraded due to outside RF interference it would affect processing operations or launch count-down operations at KSC. The TECOM Broadband Omni directional Slant Linear Antenna will identify any RF interference within all vehicle and payload frequency 0.5 - 18GHz bands. These antennas are currently in use and the characteristic are known-based on current ARFMS configurations.

TECOM Broadband Omni directional Slant Linear Antenna provides a frequency sweep from 0.5 - 18GHz bands RF bands and provides the RF signal energy level and the frequencies of the interferences. The biggest advantage for augmenting the existing ARFMS with identical TECOM Broadband Omni directional Slant Linear Antenna 0.5 - 18GHz bands will provide similar data formats as the current ARFMS in use at KSC..

Pursuant to FAR 13.106-1(b) and 13.106-3(b)(3)(i), the acquisition of the referenced requirements are only know from one source. Competition is impractical for the following reasons: TECOM Industries Inc Sensor Broadband Omni directional Slant Linear Antenna with the specifications for operations with the following 0.5 - 18GHz is the only current antenna factor implemented at KSC in which this antenna will interface with the existing KSC ARFMS.

Market research was performed by NE-E1 during the month of May-July 2011 and it was found that there are like units but they do not fit the specifications required. The TECOM Broadband Omni directional Slant Linear Antenna already in use and will be expanding an existing system these are Line Replaceable Units. We have invested considerable manpower and materials in the mounting and placement of these units and already have size, weight, and wind-loading design commitments on Pad 39B lightning towers. Alternative antenna source is EDO. Their unit can meet electrical performance but does not meet size, weight, and wind-loading constraints of design. No other known vendors that sell this type of product TECOM Broadband Omni directional Slant Linear Antenna 201564-3 Antenna 0.5 - 18GHz is the only source able to provide the required hardware.

Based upon the above, I hereby determine that the circumstances of the contract action deem only one source reasonably available for this acquisition. I certify that the supporting data presented in this justification are accurate and complete.

The requirement is required to be synopsisized in NAIS/EPS.



Peter Aragona  
Technical Representative

9/6/11

Date

I hereby certify that this justification is accurate and complete to the best of my knowledge and belief.



Joyce McDowell  
Contracting Officer

9/6/2011

Date